

REMARKS

The withdrawal of the previous bases for rejection is acknowledged with appreciation. Reconsideration of presently solicited Claims 1 to 16 respectfully is requested. For the reasons indicated in detail hereafter the presently solicited claims are urged to be in condition for allowance.

Filed concurrently herewith is a Petition for Extension of Time (three months) with the appropriate government fee.

Applicant has provided an improved method which has been found through empirical research to significantly enhance the strength properties of a non-edible dried previously formed collagen casing following its extrusion and drying. More specifically, the method has been found to reinforce and to thereby improve the clip strength and the cooking resistance of the non-edible dried collagen casing following its formation. See the data present in Applicant's Specification at Pages 9 to 12. The process makes possible the formation of a stronger non-edible dried collagen casing in the absence of sodium chloride or in the presence of a reduced concentration of sodium chloride. Thereby the method further offers environmental advantages in the area of sodium chloride disposal at the conclusion of the process. It is of great interest for environmental reasons to reduce the amount of sodium chloride that is passed to the drain at the conclusion of the process.

When practicing the improved method of the present invention a previously formed non-edible collagen casing for a foodstuff following its extrusion and drying is treated in the absence of a foodstuff with an aqueous solution of at least one salt selected from the group consisting of sodium bicarbonate, sodium sulphate, ammonium chloride, calcium chloride, sodium hydrogen phosphate, potassium

hydrogen phosphate, potassium chloride, and ammonium sulphate wherein the total salt concentration in the aqueous solution is in the range of 5-18% by weight (preferably in the range of 8-12% by weight). In a preferred embodiment at least two of these salts are present. A minor concentration of sodium chloride optionally can be included as indicated in Applicant's Specification.

The continued rejection of presently solicited Claims 1 to 16 under 35 U.S.C. § 103 (a) over the different teachings European Patent Application No. 1018301 to Sanchez et al. combined the different teachings of U.S. Patent No. 4,038,438 to Rahman et al. would be inappropriate. A detailed reading of the reasonably derived teachings of the references is urged to be in order.

As acknowledged by the Examiner at Page 3 of the Official Action: "Sanchez, J. et al. does not specifically disclose the use of an aqueous solution that contains the particular salts as required in the claimed process" (underlining added). Accordingly, the key concept of Applicant's contribution and the advantageous results provided by Applicant are neither disclosed nor remotely suggested by Sanchez et al.

More specifically stated, Sanchez et al. is representative of the prior art similar to Swedish Patent No. 515.441 that is discussed at the bottom of Page 2 of Applicant's Specification. Sodium chloride is the only salt identified in Sanchez et al. The reference always employs sodium chloride. This is technology that Applicant advantageously has avoided.

The newly cited Rahman et al. patent also relates to technology that is different from that Applicant's presently claimed contribution. Two areas of the Rahman et al. reference must be considered (*i.e.*, the "Background" section and the

subject matter that is claimed) and these areas of the Rahman et al. teachings compared to Applicant's presently solicited claims.

In the "Background" section at Col. 1, lines 58 to 63 there is reference to a coagulating bath for use when initially forming a collagen casing that "contains a salt such as sodium sulfate or ammonium sulfate in large concentration (e.g., 40% by weight)", prior to further processing. Any reference to sodium sulfate and ammonium sulfate in Rahman et al. is with reference to presence in the coagulating bath while initially forming the collagen casing. During the manufacture of artificial casings an animal hide collagen is purified and is ground to form an extrudable aqueous gel that contains elements from the animal hide. During extrusion a three-dimensional tubular structure of protein gel is formed that must be coagulated and dried. The hide elements must be brought closer together by means of the coagulation or drying. It is at this preliminary stage that Rahman et al. makes reference to the substantial presence of sodium sulfate and ammonium sulfate in the coagulation bath. In the presently claimed process the collagen casing has already been formed and there is no hint or suggestion that the clip strength and cooking resistance could be improved by treating such a previously formed material as presently claimed in accordance with parameters set forth by Applicant at a concentration of 5-18% by weight.

Applicant's claimed contribution also involves different technology than the subject matter claimed by the patentees. The technology of Rahman et al. as evidenced by title and examples concerns a method for coloring synthetic food casings while still in the gel state. Prior to coagulation and drying the casing is passed through a colorant solution "containing about 0.10 to about 3.0% by weight of

carmel and 0 to 5% by weight of a water dispersible cationic thermosetting resin for reaction with the carmel". Thereafter, the casing undergoes drying to effect cross-linking and insolubilization of the carmel. In the absence of such further treatment the casing is not ready to receive a food such as sausage.

It respectfully is submitted that there is no sound technical or legal basis to support the summary conclusion with respect to obviousness expressed in the full paragraph at Page 4 of Official Action with respect to Applicant's presently solicited claims. There is no teaching in the references that Applicant's specifically claimed technology is "functionally equivalent" to the different teachings of the references in any respect. It would do violence to the teachings of the references to somehow combine their contents in an attempt to arrive at Applicant's specifically-claimed contribution. Even if the real teachings of the references were combined, Applicant's claimed subject matter still would not result.

No *prima facie* showing of obviousness has been made. It is basic to the examination process that in order to establish *prima facie* obviousness of a claimed invention all of the claim limitations must be taught or suggested by the prior art. See M.P.E.P. § 2143.03 in this regard. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 165 U.S.P.Q. 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim dependent claim is patentable. The withdrawal of the rejection is in order and is respectfully requested.

If there is any remaining point which requires clarification prior to the allowance of the Application, the Examiner is urged to telephone the undersigned attorney so that the matter can be discussed and resolved at a personal interview.

Respectfully submitted,

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